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Jeehyeon Seo* (seo6@illinois.edu), 1409 W. Green Street, Urbana, IL 61801. *Bi-Lipschitz embeddability of the Grushin plane into Euclidean space.*

Many sub-Riemannian manifolds like the Heisenberg group do not admit bi-Lipschitz embedding into any Euclidean space. In contrast, the Grushin plane admits a bi-Lipschitz embedding into some Euclidean space. This is done by extending a bi-Lipschitz embedding of the singular line, using a Whitney decomposition of its complement. (Received September 09, 2010)